STATEMENT OF THE HONORABLE T. ALLAN MCARTOR FEDERAL AVIATION ADMINISTRATOR BEFORE THE SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION CONCERNING AVIATION SAFETY IN A DEREGULATED ENVIRONMENT OCTOBER 15, 1987.

Mr. Chairman and Members of the Subcommittee:

I welcome the opportunity to appear before the Committee today to discuss with you the topic of aviation safety in a deregulated environment. At the outset, let me make clear my conviction that airline deregulation has been good for the United States. It has made airline transportation more affordable and, therefore, accessible to segments of the population never before able to fly.

Mr. Chairman, the questions before your Committee require careful deliberation. How we as a Nation answer them could well determine how competitive American commerce will be in the 1990's. Whether we have the courage to work together as a Nation to maintain the benefits of deregulation will determine how successful we are in these deliberations.

Mr. Chairman, I share your concern about the effect of deregulation on safety. Some adjustments are necessary, and I believe FAA is making them. But before I discuss what we at FAA are doing and plan to do about maintaining and improving safe air travel, I believe a frank assessment of deregulation and its effect on our Nation's civil aviation system is in order. At issue today is whether deregulation has contributed or detracted from air safety and whether we need some form of re-regulation.

In and of itself, economic deregulation of airlines achieved its purpose: supply was released to compete for demand, a greater supply increased competition which in turn reduced prices. But taken in the context of where the country was in the mid to late 1970's, many of deregulation's benefits were masked by other problems. In the mid-70's, high fuel prices, interest rates, and the recession dampened industry's ability to fund new capital improvements and expand operations.

when the recession ended, and fuel prices and interest rates came down, the pent-up energy of deregulation exploded. Suddenly, industry re-invested in airline growth. New carriers entered the market at a rapid pace, changing route structures with relative ease. Hub airports were created to cope with accelerated supply and increasing demand. Cheaper fares ruled the day, and regional air carriers grew up overnight. An entire new industry of express package delivery was born. Air commerce experienced a rapid rebirth. But unintended consequences of rapid growth also surfaced. In some ways, the country was caught off guard.

New concentration on hub routes increased air travel, tightened slack, and lessened the reserves of spare parts and planes, and rapid turnaround times at these hubs put great pressure on all operations and maintenance people. Passenger demand for peak hour travel created scheduling games by the airlines, unrealistically setting departures to capture market share mather than improve on-time performance.

Evolution of these hubs also meant a major shift in geographic location of demand for FAA surveillance and inspections. More inspectors were needed. Expanded entry also increased pressure on FAA to certify new carriers while maintaining adequate inspection staff to ensure public safety. An already hard-pressed inspection work force had to sacrifice surveillance to work on getting these new airlines in business. In the early years these challenges were not adequately met. However, this was recognized, and inspector staffing has increased considerably since 1984. And of course in 1981, we experienced the controller strike, greatly reducing the air traffic control system's capacity to handle demand.

On top of it all, in the mid 1980's, there was the introduction of major new aircraft types into the United States fleet like the Boeing 757 and 767 and a number of new makes of the Airbus A300/310 models. These aircraft represented quantum leaps in technology and automation and put additional demands on crew procedures, training, and maintenance programs. And we found that airline mergers affected management labor relations, often resulting in cockpit crews having to merge training procedures from two or more different corporate cultures. And finally, we found FAA trying to recover from the controller strike, rebuild its aviation inspector workforce, and handle increased demand with airports and air traffic equipment built in the 1950's.

What has been the effect on safety of these rapid changes in civil aviation? Can we tie economic deregulation to an erosion of safety margins in our air traffic control system? Statistics are one obvious measure, so let's examine the record from a statistical point of view.

Deregulation has resulted in a tremendous explosion in air travel--from 220 billion passenger miles in 1978 to more than 366 billion passenger miles in 1986 and projected 386 billion in 1987. And this proliferation in air commerce has occurred within the context of a steadily decreasing fatality rate. Taken together, from 1978 through 1986 the trend in the number of fatalities per billion passenger miles hassteadily declined from 1.6 to near zero. The tragedy of the Northwest crash in Detroit changes the 1987 record, however. In this same time period the number of airlines has also risen from 39 to 100, the number of planes in service is up more than 20 percent, and the seats per plane have risen nearly 30 percent, the overall safety trend has continued dramatic improvement: 1.19 fatalities per billion in the 1972-79 period compared to an average 0.48 from 1979 to 1986. Even with better reporting and increases in the number of passenger miles flown, the number of near misses per passenger mile flown in 1986 was almost identical to the number in 1978, the year of deregulation.

But statistics alone can be misleading. The numbers of accidents and fatalities are so small that one cannot logically construct any statistically valid relationship between airline deregulation and the number of fatalities, near misses, or safe travel. Debates over numbers miss the heart of the issue. I do not think, however, the American people, Congress, and those of us in the aviation community should take any inordinate comfort in downward trends of operational errors (for example) than to take undue alarm in any short term increases in operational errors.

Mr. Chairman, deregulation may be more a victim of its own success than a cause of reduced safety. But clearly, the public is asking, "are the skies safe enough?" They aren't satisfied with yesterday's safe landing; they're worried about tomorrow's takeoff. What we face today is not a crisis of safety brought on by deregulation, but a crisis of public confidence.

Today's look inward is healthy, and we need more of it. It is precisely what I've done in the two months since I've been at the FAA. I recognize the important role the aviation subcommittees have played in focusing FAA's resources on its safety responsibilities in a deregulated environment, and I intend to maintain the inspection program and the firm enforcement policy you have supported over the past few years.

As the new Administrator, I've been able to ask some tough questions and look for some new answers. For example, I measure safety as exposure to risk, not absence of accidents, and I want FAA to develop better indices of safety so that the traveling public can be confident that the margin of safety has not eroded during this period of explosive growth. I've asked for renewed commitment to accelerate the modernization of our equipment, procedures, and people in the air traffic system, a program entitled Impact '88. I've laid out an ambitious agenda of change and new direction for FAA this fiscal year, designed to recapture public confidence in aviation and rebuild our aviation infrastructure. I believe that increased accountability is the type of self-regulatory step that aviation professionals must take to regain public trust.

My program starts with people. Too often, we focus on numbers—of controllers, pilots, technicians, maintenance inspectors—rather than on quality. I'm concerned, for example, about pilot and crew professionalism. When I called together the Nation's chief pilots last August for a face—to—face meeting in Kansas City, I asked for their commitment, as professionals, to maintain that razor edge vigilance every day; to combat the routine and expect the unexpected. I'm concerned about pilots and crews landing at

wrong runways, wrong airports, or dialing in the wrong navigational waypoints. It's that last landing of the day, clear skies, sun setting, that concerns me. We must increase our emphasis on the human factors—the ergonomics of flying, how pilots and crews work with machines and automation.

Accordingly, I've asked for a much greater commitment to human factor research. We are conducting a top to bottom review of pilot training and working with industry to revise our pilot training regulations, the first major change in nearly 30 years. I want to make sure we are truly modern in how we train and certify our Nation's airline pilots.

I've also asked our controller workforce for renewed vigilance in our nation's control towers and enroute centers. I'm concerned about controller professionalism. I'm setting up regular meetings with the controller workforce. The first one will be in Atlanta at the end of the month to examine the human factors in our air traffic facilities and ways that FAA managers help or hinder controller performance.

We have enough controllers for every position, but I'm concerned about our benchstrength and reserves. To get out ahead of the aviation growth curve, we need more controllers in 1988 and much better ways to train them. In the Impact '88 program, we are pursuing new approaches to recruiting, hiring, and training controllers that should greatly reduce the time needed to bring them to full performance levels. I need your support, Mr. Chairman and members of this committee, to truly modernize how FAA hires, trains, and retains its controller workforce.

Likewise, we can't allow competitive pressures on airline carriers to erode the margin of safety needed to maintain and upgrade our air carrier fleets. I will continue to ensure that the needed numbers of aviation inspectors are available to meet new and changing industry requirements as air commerce grows. But I also want the chief executive officers of the Nation's airlines to feel personally accountable to their safety obligations as they do to their shareholders. Most claim they already are. If so, fine. I would like them to personally sign off on reports to FAA showing how they are complying with FAA airworthiness requirements. I believe it's a small price to pay on the part of our airline executives to prove to the traveling public that the service and delay problems passengers are experiencing at the gate have not carried over into safety in the air.

Mr. Chairman, I'll pledge to provide the quality professionals in our civil aviation system. I need your help to ensure we reach this goal.

Under my Impact "88 program, I've also called for acceleration of our modernization efforts under the NAS Plan. We must quicken the pace of replacing old hardware and move up the timetables for advanced technology. Toward this end, I've requested, and then Secretary Dole and now Acting Secretary Burnley have approved, a major increase in my authority to procure new equipment. The FAA authority to handle its own contracts was increased from \$200,000 to \$150,000,000. We've been able to develop a partnership to involve the OST at the beginning, but to turn responsibility over to us where it belongs. We are establishing in FAA the needed checks and balances. This delegation reflects the renewed commitment of both FAA and the Office of the Secretary to work together for aviation safety. I have every confidence that the positive partnership I started with Secretary Dole will be continued and strengthened under Jim Burnley, when he is confirmed by the Senate.

Mr. Chairman, we have a unique opportunity to work together to reap the enormous promise today's challenges hold. During my confirmation hearings, you asked me to tell you whenever I needed your help. I haven't forgotten your kind offer of assistance and plan to work closely with you to keep our civil aviation system the safest and most advanced in the world.